6. Notes on Mayer's Pigeon (Nesænas mayeri). By Lieut.-Colonel N. Manders, F.Z.S.

[Received August 8, 1907.]

This bird is now so nearly approaching extinction, that it is perhaps advisable to put on record all available information regarding its distribution and habits, and I have therefore compiled a few notes embodying all I know and have ascertained from other persons about this bird, which may be interesting to

ornithologists and naturalists generally.

Before the indigenous forests were largely destroyed it was probably abundant all over the island of Mauritius, but its range has become gradually more and more circumscribed, until at the present day it is entirely confined to a small range of forest-clad hills in the south-western corner of the island known as the Savanne district, comprising a country some eight miles from east to west and from two to three from north to south. The hills rise abruptly from the sea-coast to an elevation varying from a thousand to nearly two thousand feet, thence extending to a plateau covered now with light scrub jungle which stretches northwards at a gradually decreasing elevation to the central plain, which is now entirely under cultivation. I have never observed the bird in this scrub jungle, and it only visits it at a certain period of the year, under conditions to which I shall subsequently allude.

For administrative purposes this range of hills is divided up into the following forest districts, all nearly continuous and in all of which the bird is found:—Les Mares, and Grand Bassin, where it is most common; Calbot, Kanaka, Coutanceau and Dayot; a few at Charmarel; and I have once seen it at Morne Brabant in

the extreme south-western corner of the island.

The character of these forests is much the same; they are very thick and almost impenetrable owing to the multitude of seedlings and young trees, which are allowed by an inefficient Forest Department to grow up and choke each other by their tangled growth. There is a singular absence of large trees, one of three feet in diameter is rare, and these usually show signs of incipient decay. For six months in the year the rainfall is very heavy, sometimes it rains continuously for days, making the woods almost one vast swamp. Under these circumstances it is frequently difficult to get near the birds to observe their habits; it requires patience and a disregard for one's personal comfort.

In the early morning shortly after sunrise they come out and sun themselves, and their "whoo" "whoo" may be heard at a considerable distance. My friend M. Georges Antelme, who has probably a more extensive acquaintance with it than any other naturalist, gives it as his opinion that the number of birds still existing does not exceed one hundred and fifty pairs, and from my own frequent rambles through these forests in the last two and a

half years, I should say this is an outside estimate. It is somewhat difficult at first sight to account for their diminution, when we consider that they are not destroyed by Europeans, and that possessing a character for being unwholesome to eat they are not trapped. It may fairly be said that in this instance at any rate man is not directly responsible for its extinction. I say directly, but indirectly he undoubtedly is. The Portuguese, who had a penchant for monkey-flesh, introduced an Indian species of monkey into the island shortly after they first discovered it in the middle of the sixteenth century. Until the last few years, these animals confined their depredations to the jungle-covered hills surrounding Port Louis and the adjoining cane-fields. Now, by some unfortunate mischance, but probably by a necessary emigration owing to their increasing numbers, they have spread to all parts of the island, and the Savanne forests are overwhelmed by their numbers. Not only do they do incredible damage by destroying the fruits of valuable forest trees, but they destroy also the seedlings and tender shoots of trees of larger growth; and large numbers of natives are constantly employed to keep them off the cane-fields, where they do enormous mischief in the shortest possible time. The Pigeons are totally unable to resist this invasion of their last refuge as their nests, eggs, and young are ruthlessly destroyed; and the forest keepers inform me that in consequence the birds have almost ceased to breed. It was in the Savanne forest that the last specimen of the Dutch Pigeon (Alectronas nitidissima). now in the Port Louis Museum, was shot in the year 1826. It seems strange that one species should survive the other for close on a hundred years, and were it not for the pestilent monkey would probably do so for another hundred. I venture to give the following explanation of the phenomenon.

Heemskerk, who visited the island in 1601, mentions that the sailors knocked down with their sticks a large number of pigeons with "red tails," which on being eaten proved so disconcerting to the Dutchmen's stomachs, making them violently sick, that they subsequently left them severely alone, and they probably passed on an account of their unpleasant experiences to others of their countrymen. This evil reputation has happily survived to the present day and with it the pigeon; whereas the Dutch Pigeon being a toothsome and withal a wholesome diet, has succumbed. As a matter of fact Mayer's Pigeon is not unwholesome, though this fact is carefully hidden away in the bosoms of local naturalists. The Curator of the Port Louis Museum, who skinned one, had sufficient courage to tackle the flesh, and found it uncommonly tough but nothing more. At a certain season of the year the birds, as I have said, leave the forest and come out into the adjoining scrub to feed on the berries of the "Tomdamane" (Aphloia theiformis), of which they are inordinately fond, and on which they gorge themselves to repletion. It appears that these berries have some intoxicating properties, as they render the birds so helpless that they can be readily snared by a noose at the end of a stick.

It is quite possible that when in this condition the flesh becomes unwholesome for the time being. It is to be noted that Heemskerk specially mentions the red tails of the pigeons, from which I conclude he means "Mayer's Pigeon," as this is very conspicuous

especially when in flight.

It nests twice in the year, in October and again in January. The nest is similar to that of the common Wood-Pigeon and merely consists of a few sticks laid together in the branches of a tree a few feet from the ground. The eggs are pure white, similar to but decidedly larger than those of the wood-pigeon. I am inclined to think that the young birds for some time are of an uniform rusty red much like the tail of the adult bird, and that it is only subsequently that they assume the adult plumage. In confinement they lose to a great extent their extreme delicacy of colouring, the bill loses a great deal of its brilliant crimson, and the plumage on the neck and breast assumes a dull pinkish slate-colour rather than a beautiful rosy pink. In characteristics generally it is much more a dove than a pigeon. In confinement at any rate they are extremely pugnacious, and being essentially bullies the bird which gains the upper hand certainly does its best to hunt the other to death.

It is interesting to note that its mental development is at the same level as when the island was first discovered. It exhibits not the slightest fear of man, and at the present day it would be as easy to knock them over with a walking-stick as it was three hundred years ago. The climate of these Mauritian forests is of sub-tropical character, and I have no doubt that with very slight protection it would do well in England. So far it has not bred in confinement, but I am inclined to think that the conditions under which they were kept were not favourable. I should much like to see a successful attempt in England, the more so as the time is fast approaching when Mayer's Pigeon will be a thing of the past.

7. On some Points in the Structure of Galidictis striata. By Frank E. Beddard, M.A., F.R.S., Prosector to the Society.

[Received October 17, 1907.]

(Text-figures 209-216.)

In continuation of a series of communications* to the Society upon the anatomy of the smaller Carnivora, I beg leave to offer the following notes upon the little-known Madagascar Viverrine, Galidictis striata, which has not, so far as I am aware, been

^{* &}quot;On the Visceral and Muscular Anatomy of Cryptoprocta," P. Z. S. 1895, p. 430. "On certain points in the Anatomy of the Cunning Bassarisc, Bassariscus astutus," ib. 1898, p. 129. "On the Anatomy of Bassarieyon alleni," ib. 1900, p. 661. "Some notes upon the Anatomy of the Ferret Badger, Helictis personata," ib. 1905, p. 21.